

Name: _____ Period: _____ Date: _____

Slope-Intercept Form Bell Work

Write an equation in slope-intercept form of the line that passes through the given points.

1) $(-4, -3)$ and $(3, 4)$

2) $(10, 2)$ and $(-2, -2)$

3) $(-4, -1)$ and $(-8, 7)$

4) $(3, 3)$ and $(6, 5)$

Slope-Intercept Form Bell Work**Answer Key**

Write an equation in slope-intercept form of the line that passes through the given points.

1) $(-4, -3)$ and $(3, 4)$

$$\text{Slope } m = \frac{4 - (-3)}{3 - (-4)} = \frac{7}{7} = 1$$

$$y = mx + b \rightarrow 4 = 1(3) + b$$

$$b = 1$$

$$y = x + 1$$

2) $(10, 2)$ and $(-2, -2)$

$$\text{Slope } m = \frac{-2 - 2}{-2 - 10} = \frac{-4}{-12} = \frac{1}{3}$$

$$y = mx + b \rightarrow 2 = \frac{1}{3}(10) + b$$

$$b = -\frac{4}{3}$$

$$y = \frac{1}{3}x - \frac{4}{3}$$

3) $(-4, -1)$ and $(-8, 7)$

$$\text{Slope } m = \frac{7 - (-1)}{-8 - (-4)} = \frac{8}{-4} = -2$$

$$y = mx + b \rightarrow 7 = -2(-8) + b$$

$$b = -$$

$$y = -2x - 9$$

4) $(3, 3)$ and $(6, 5)$

$$\text{Slope } m = \frac{5 - 3}{6 - 3} = \frac{2}{3}$$

$$y = mx + b \rightarrow 3 = \frac{2}{3}(3) + b$$

$$b = 1$$

$$y = \frac{2}{3}x + 1$$